

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of optimizing the synchronization of data between a client computer having a client database and a server computer having a server database, comprising:

~~receiving~~ communicating a plurality of data objects from the client computer to the server computer, wherein the plurality of data objects includes a parent object;

determining if ~~a received data~~ the parent object is improperly received, wherein the determination of an improperly received [[data]] parent object is based upon the detection of a data transfer error associated with the parent object; and

~~selectively transmitting~~ communicating a child object associated with the parent object from the client computer to the server computer, only if no data transfer error was detected with respect to the [[a]] parent object associated with the child object.

2. (Currently amended) A method of optimizing the synchronization of data between a client computer having a client database and a server computer having a server database, wherein each database comprises a plurality of data objects arranged in an object hierarchy comprising at least one parent object and at least one associated child object, comprising:

receiving at the server computer a [[data]] parent object transferred from the client computer;

assigning a status code to the [[data]] parent object received at the server computer, the status code being based upon the detection or non-detection of a data transfer error;

transmitting the status code assigned to the [[data]] parent object to the client computer, ~~thereby updating~~ wherein the status code is assigned to the [[data]] parent object stored in the client database;

updating a status code of child objects associated with the [[updated data]] parent object in the client database, the updated status code of [[the]] child objects being based on the status code of the [[updated data]] parent object; and

selectively ~~transmitting~~ communicating child objects associated with the parent object from the client computer to the server computer, wherein child objects associated with the parent object are communicated if the status code indicates a non-detection of a data transfer error associated with the parent object ~~the selection being based on the status code of the child objects.~~

3. (Original) The method of Claim 2, wherein the status code is assigned by the server computer.

4. (Original) The method of Claim 2, further comprising:
assigning a server ID to the data object received at the server computer if no transfer error was detected; and

transmitting the server ID assigned to the data object to the client computer.

5. (Currently amended) The method of Claim 4, wherein the status code and the server ID are assigned by the server computer.

6. (Currently amended) The method of Claim 4, further comprising updating a server ID of child objects associated with the ~~updated data~~ parent object, the updated server ID of the child objects being based on the server ID of the ~~updated data~~ parent object; and wherein the selective transmission of child objects associated with the parent object to the server computer is also based on the server ID of the child objects.

7. (Original) The method of Claim 2, further comprising, transmitting at least one new data object to the client computer, a server ID being assigned to said at least one new data object.

8. (Original) The method of Claim 7, wherein the new data objects include a server ID assigned by the server computer.

9. (Currently amended) The method of Claim 2, wherein the object hierarchy further comprises at least one grandchild object associated with the at least one child object and the at least one parent object, the method further comprising:

assigning a child status code to child objects associated with the parent object received at the server computer, the child status code being based upon the detection or non-detection of a data transfer error associated with the child objects;

updating a status code of grandchild objects associated with a child objects object and associated with the updated data parent object, the updated status code of the grandchild objects associated with a child object associated with the parent object being based on the child status codes ~~code of the updated data object;~~ and

selectively transmitting communicating grandchild objects associated with a child object associated with the parent object from the client computer to the server computer, wherein grandchild objects associated with a child object associated with the parent object are communicated if the status code of the grandchild objects indicate a non-detection of a data transfer error associated with the child object ~~the selection being based on the status code of the grandchild objects.~~

10. (Currently amended) The method of Claim 9, wherein the status ~~code is~~ codes of child objects are assigned by the server computer.

11. (Original) A computer-readable medium containing computer-readable instructions which, when executed by a computer, perform the method of any one of Claims 2-10.

12. (Original) A computer-controlled apparatus for performing the method of any one of Claims 2-10.

13. (Currently amended) A method of optimizing the synchronization of data stored in a client computer database and with data stored in a server computer database, wherein each database comprises a plurality of data objects arranged in an object hierarchy comprising at least one parent object and at least one associated child object, comprising:

transmitting a parent object from a client computer to a server computer;

receiving at the client computer mapping information for the parent object generated by the server computer, the mapping information being based upon the detection or non-detection of a data transfer error associated with the parent object;

updating a status code of child objects associated with the parent object, the updated status code of ~~[[the]]~~ child ~~object~~ objects being based on the mapping information; and

selectively transmitting child objects from the client computer to the server computer, wherein child objects associated with the parent object are communicated if the mapping information indicates a non-detection of a data transfer error associated with the parent object ~~the selection being based on the status code of the child object.~~

14. (Currently amended) The method of Claim 13, wherein:

the mapping information also includes a server ID;

the method further comprises updating a server ID of child objects associated with the parent object, the updated server ID being based on the mapping information; and

the selective transmission of child objects from the client computer to the server computer is also based on the server ID of the child objects.

15. (Original) The method of Claim 13, further comprising, receiving at least one new object from the server computer, a server ID being assigned to each of said at least one new object.

16. (Original) A computer-readable medium containing computer-readable instructions which, when executed by a computer, perform the method of any one of Claims 13-15.

17. (Original) A computer-controlled apparatus for performing the method of any one of Claims 13-15.

18. (Currently amended) A method of optimizing the transfer of data stored in a client computer database and to a server computer for storage in a server computer database, wherein each database comprises a plurality of data objects arranged in an object hierarchy comprising at least one parent object and at least one associated child object, comprising:

receiving, at the server computer, a [[data]] parent object from the client computer;

assigning a status code to the ~~received data~~ parent object, the status code being based upon the detection or non-detection of a data transfer error associated with the parent object;

transmitting the status code assigned to the [[data]] parent object from the server computer to the client computer, wherein the status code enables the client computer to selectively communicate at least one child object associated with the parent object if the status code assigned to the parent object indicates the absence of a data transfer error; and

receiving at the server computer at least one child objects object associated with the parent object [[data]], if the status code assigned to the parent object indicates the absence of a data transfer error.

19. (Currently amended) The method of Claim 18, further comprising:

assigning a server ID to the received [[data]] parent object; and

transmitting the server ID assigned to the [[data]] parent object from the server computer to the client computer.

20. (Currently amended) The method of Claim 18, wherein the object hierarchy further comprises at least one grandchild object associated with the at least one child object and the at least one parent object, the method further comprising:

assigning a child status code to child objects associated with the parent object received at the server computer, the child status code being based upon the detection or non-detection of a data transfer error associated with the child objects;

communicating the child status codes from the server computer to the client computer;
and

receiving grandchild objects associated with a child object associated with the parent object from the client computer, wherein grandchild objects are communicated if the child status code indicates a non-detection of a data transfer error associated with the child object further comprising, transmitting at least one of new objects from the server computer to the client computer, a server ID being assigned to said at least one new objects.

21. (Original) A computer-readable medium containing computer-readable instructions which, when executed by a computer, perform the method of any one of Claims 18-20.

22. (Original) A computer-controlled apparatus for performing the method of any one of Claims 18-20.